

POBRSF  
21.2-2  
1/14/09

Retention of Portland Harbor samples  
Applegate, Rick  
to:  
Eric Blischke, Chip Humphrey  
01/14/2009 05:01 AM  
Cc:  
"dlivesay@GSIWatersolutions.com",  
"kparrett@GSIWatersolutions.com"  
Show Details



Eric and Chip, as you know, LWG representatives have approached EPA about the possible disposal of a large number of currently archived samples collected under EPA directive for the Portland Harbor RI/FS. Here are the points Dave and Kevin have made to me in urging the retention of those samples. These points address only the possible use of the samples for the RI and FS--not potential uses in the RD/FA phase or the possible use of some of the samples by other public entities (DEQ, USGS, the Trustees, etc) to assist them in their broader water quality evaluations in the Lower Willamette.

Here is what they have told me:

Although most samples have exceeded holding times, the sediment and biota samples are stored at - 20 oC and should experience little degradation for many chemicals of interest such as PCBs for example. The exception is the water samples stored in refrigerators above freezing. These likely have little analytical value and should be considered for disposal.

Our main message on sample retention is that we are all working on a draft remedial investigation and risk assessment reports, and scoping the FS. We have not reviewed the RI, risk assessments, or the modeling work because they are not completed. Consequently, it is difficult to determine whether information or gaps in these reports could benefit from supplemental analysis of archived samples. A few possible uses are:

- \* Supplemental congener analysis to support the interpretation of the contaminants of interest (e.g., total PCB congener vs. total PCB aroclor concentrations).
- \* Resolving anomalies or questions raised by individual or groups of samples that cause uncertainties or bias the findings of the reports. An example may be issues related to coelution of chemicals during analysis that cause false positives or data that may be biased-high as a result of interference during quantification. PCB congeners and pesticides are chemicals that are known to coelute.
- \* Data gaps that are identified in the hybrid modeling that might be addressed by analysis of archived samples that were not analyzed for all constituents (e.g., butyltins, dioxins/furans, and PCB congeners).

\* Unanticipated gaps in nature and extent of chemicals, or engineering/chemical properties to evaluate technologies that may arise as the FS progresses.

The uses identified above are speculative, however questions will arise and additional analysis could provide answers. Additionally, the costs to retain the samples are small in the big picture and retaining the samples until the completion of the RI/FS is a logical and methodical approach to the project.

I hope these points from Dave and Kevin are helpful as we continue to discuss the issue of retention of the samples. I also believe it will be important to check quickly with the other public entities to see if they would benefit from analysis of some of the samples. I suspect this would entail their use of a small subset of the overall sample inventory to evaluate contaminants that were not analyzed as part of the RI/FS analyses (pharmaceuticals, PBDE, etc).

I have copied Dave and Kevin in case they wish to offer additional observations. See you soon.